

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 80-22

NPDES NO. CA0037851

WASTE DISCHARGE REQUIREMENTS FOR:

LAS GALLINAS VALLEY SANITARY DISTRICT
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

1. Las Gallinas Valley Sanitary District (hereinafter discharger), by application dated February 11, 1980 has applied for waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
2. The discharger presently discharges domestic and industrial wastes from its sewage treatment plant into Miller Creek and thence to San Pablo Bay, waters of the United States, through an outfall at 38° 01' 33" north latitude and 122° 30' 59" west longitude.
3. The present discharge has the following:

Average Dry Weather Flow:	2.0 million gallons per day (mgd)
BOD:	29 milligrams per liter (mg/l)
Suspended Solids:	24 mg/l
4. A Water Quality Control Plan for the San Francisco Bay Basin was adopted by the Board in April 1975. The Basin Plan contains water quality objectives for Miller Creek and San Pablo Bay.
5. The beneficial uses of Miller Creek and San Pablo Bay are:
 - a. Water Contact Recreation
 - b. Non-Contact Water Recreation
 - c. Commercial and Sport Fishing
 - d. Wildlife Habitat
 - e. Preservation of Habitat for Rare and Endangered Species
 - f. Marine Habitat
 - g. Fish Migration
 - h. Fish Spawning
 - i. Shellfish Harvesting
 - j. Navigation
6. The Basin Plan prohibits the discharge of wastewater which has characteristics of concern to beneficial uses:
 - a. At any point at which the wastewater does not receive a minimum initial dilution of at least 10:1, and

- b. Into any nontidal water or dead-end slough or similar confined water areas or their immediate tributaries.

Exceptions can be considered where a discharge is approved as part of a reclamation project or where it can be demonstrated that environmental benefits will be derived as a result of the discharge.

- 7. The discharger proposes the following:
 - a. The discharger's treatment plant will be upgraded to provide an effluent with an average 15 mg/l BOD and 10 mg/l suspended solids for a flow of 5.56 mgd.
 - b. Waste will be discharged to Miller Creek only during the wet weather season from October 1 through April 30. Treated wastewater will be discharged directly, or through the wildlife pond, to Miller Creek during wet weather. The outfall from the wildlife pond will be located near the outfall from the treatment plant.
 - c. During the dry weather season, all wastewater will be reclaimed.
- 8. The Board finds that Miller Creek is a confined water area that does not provide a 10:1 dilution of the wastewater. However, the discharge, under the requirements of this order, complies with the qualification in Finding 6 for a reclamation project for considering an exception to the prohibition against discharge to a confined water area and discharge without 10:1 dilution, and the Board allows the discharge.
- 9. The Board will adopt waste discharge requirements covering the dry weather reclamation in a separate order.
- 10. Novato Sanitary District, as lead agency for the Eastern Marin and Southern Sonoma Wastewater Agencies which include the discharger, requested an NPDES Permit time extension for construction of required facilities. This request was pursuant to Section 301(i)(1) of the Federal Water Pollution Control Act (FWPCA), as amended. The Board finds the request warranted and grants the time extension for compliance with Section 301(b) pursuant to Section 301(i) of the Act.
- 11. Novato Sanitary District as lead agency for Eastern Marin and Southern Sonoma Wastewater Agencies certified a final Environmental Impact Report (EIR) on September 17, 1979, for their wastewater management projects in accordance with the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.). The members of this Regional Board have received and reviewed a summary of those documents.
- 12. The EIR specifies that this project could have the following adverse impact on the environment:

Possible odors from the wastewater treatment plant may affect nearby residents.

13. Compliance with Standard Provision A.1. of this Order will mitigate adverse impacts of Finding 12. To maintain compliance, the discharger will cover the primary clarifier and sludge thickening, degritting and dewatering facilities. The trapped exhaust gases will be scrubbed before venting to the atmosphere.
14. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder and to the provision of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

1. The discharge of wastewater to waters of the State is prohibited from May 1 through September 30 or during a year of average net evapotranspiration. The Executive Officer may authorize an extended period of discharge based on a demonstration that evapotranspiration is less than normal, but in no case shall discharge to waters of the State take place between June 1 and September 1.
2. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the treatment plants or from the collection system.
3. The average dry weather flow shall not exceed 2.92 mgd. Averages shall be determined over three consecutive dry weather months each year.

B. Final Effluent Limitations

1. The waste as discharged to waters of the State shall meet the following limitations:

<u>Constituents</u>	<u>Units</u>	<u>Maximum Daily</u>	<u>30-day Average</u>	<u>Annual Average (1)</u>
a. BOD	mg/l	30	20	
	lbs/day	1390	924	
	kg/day	630	419	
b. Suspended Solids	mg/l	20	15	
	lbs/day	924	695	
	kg/day	419	315	

<u>Constituents</u>	<u>Units</u>	<u>Maximum Daily</u>	<u>30-day Average</u>	<u>Annual Average (1)</u>
c. Grease and Oil	mg/l	15	5	
	lbs/day	696	232	
	kg/day	315	105	
d. Total Ammonia ⁽²⁾ as N	mg/l		6.0	4.5
	lbs/day		505	221
	kg/day		229	100
e. Settleable Solids ⁽²⁾	ml/1-hr		0.1	

f. Total Coliform:

At some point in the treatment process the waste shall not exceed a median most probable number (MPN) of coliform organisms of 2.2 per 100 milliliters as determined from the results of the previous consecutive 7 days for which analyses have been completed. Any single sample shall not exceed 10,000 MPN/100 ml when verified by a repeat sample taken within 48 hours.

g. Chlorine residual shall have an instantaneous maximum of 0.0 mg/l. This limitation shall apply prior to discharge of waste to the wildlife pond.

h. The pH shall not exceed 8.5 nor be less than 6.5.

i. TOXICITY:

The survival of test organisms acceptable to this Board in 96-hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

j. The arithmetic mean of the biochemical oxygen demand (5 day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).

(1) Annual average shall be calculated as the average of 30-day averages for the months during which discharge is made to waters of the State.

(2) For effluent diverted to the wildlife pond, compliance may be demonstrated for flows either entering or leaving the ponds.

2. During wet weather, for days when flow exceeds twice the average dry weather flow, the limitations in Effluent Limitation B.1 will be revised as follows:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
a. BOD	mg/l	30	60
	lbs/day	2527	8607
	kg/day	1146	3905
b. Suspended Solids	mg/l	30	60
	lbs/day	2527	8607
	kg/day	1146	3905
c. Grease and Oil	mg/l	10	20
	lbs/day	842	2869
	kg/day	381	1301

d. Total Coliform:

At some point in the treatment process, the total coliform bacteria for a median of 5 consecutive samples of waste shall not exceed 240 MPN/100 ml. Any single sample shall not exceed 10,000 MPN/100 ml when verified by a repeat sample taken within 48 hours.

The 30-day average limits for BOD, suspended solids and grease and oil shall be calculated as the weighted averages of the 30-day limitations applicable to each day's flows in any given month as contained in B.1. and B.2. of this Order.

3. Representative samples of the effluent shall not exceed the following limits more than the percentage of time indicated:(a)

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>50% of time</u>	<u>10% of time</u>
Arsenic	mg/l (kg/day)	0.01 (0.11)	0.02 (0.21)
Cadmium	mg/l (kg/day)	0.02 (0.21)	0.03 (0.32)
Total Chromium	mg/l (kg/day)	0.005 (0.05)	0.01 (0.11)
Copper	mg/l (kg/day)	0.2 (2.10)	0.3 (3.16)
Lead	mg/l (kg/day)	0.1 (1.05)	0.2 (2.10)
Mercury	mg/l (kg/day)	0.001 (0.01)	0.002 (0.02)
Nickel	mg/l (kg/day)	0.1 (1.05)	0.2 (2.10)
Silver	mg/l (kg/day)	0.02 (0.21)	0.04 (0.42)
Zinc	mg/l (kg/day)	0.3 (3.16)	0.5 (5.26)
Cyanide	mg/l (kg/day)	0.1 (1.05)	0.2 (2.10)
Phenolic Compounds	mg/l (kg/day)	0.5 (5.26)	1.0 (10.52)
Total Identifiable Chlorinated Hydrocarbons	mg/l (kg/day) ^(b)	0.002 (0.02)	0.004 (0.04)

(a) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(b) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

C. Interim Effluent Limitations

Prior to the compliance deadline for Effluent Limitations B.1. and B.2. as specified in Provision E.1., discharge of an effluent containing constituents in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Average</u>	<u>Maximum Daily</u>
a. BOD	mg/l	30	45	60
	lbs/day	2527	-	8607
	kg/day	1146	-	3905
b. Suspended Solids	mg/l	30	45	60
	lbs/day	2527	-	8607
	kg/day	1146	-	3905
c. Oil & Grease	mg/l	10	-	20
	lbs/day	842	-	2869
	kg/day	381	-	1301

d. Total Coliform:

At some point in the treatment process, the total coliform bacteria for a median of 5 consecutive samples of waste shall not exceed 240 MPN/100 ml. Any single sample shall not exceed 10,000 MPN/100 ml when verified by a repeat sample taken within 48 hours.

D. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Significant alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

- a. Dissolved oxygen 5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
- b. Dissolved sulfide 0.1 mg/l maximum

E. Provisions

1. The discharger shall comply with the following time schedule to achieve compliance with Prohibitions A.1 and A.2; Final Effluent Limitations B.1 a thru f, B.1.h thru j, B.2 and B.3; and Receiving Water Limitations D.1.a, D.1.d, D.1.e, and D.2:

<u>Task</u>	<u>Completion Date</u>
a. Submit financial plan to assure that local share of construction funds will be available by November 7, 1980	by June 1, 1980
b. Obtain construction funding	by November 7, 1980
c. Submit completed plans and specifications of all facilities necessary to achieve compliance to SWRCB for approval	by September 30, 1980
d. Advertise for construction bids	by February 1, 1981
e. Award construction contract	by June 1, 1981
f. Begin construction	by July 1, 1981
g. Complete construction	by May 1, 1983
h. Full compliance	by July 1, 1983

2. The waste shall meet all Effluent Limitations of this Order, except Effluent Limitations B.1.g. and B.1.i, without or prior to dilution with Miller Creek water. Only Miller Creek water of such quality as to enhance compliance with the requirements of this Order shall be added to the waste effluent.
3. Within 120 days of the date of adoption of this Order, the discharger shall submit a proposed compliance schedule for the development of a pretreatment program to this Board and EPA. When the schedule is approved by the Regional Board and EPA, the permit shall be modified to include the approved compliance schedule.

4. Waste discharged to the wildlife pond from September 1 through May 31 shall meet all requirements prescribed in this Order if there is to be any discharge from the wildlife pond to San Pablo Bay during this period. At other times, waste discharged to the wildlife pond may meet the reclamation requirements prescribed in a separate order. No discharge to the wildlife pond shall be made when flows to the treatment plants exceed twice the average dry weather flows.
5. Waste in storage ponds may be discharged through the outfall from September 1 through May 31 only when the discharger receives written approval of the Executive Officer after demonstrating to his satisfaction that such discharge:
 - . is necessary for prudent operation and maintenance of the storage and irrigation facilities.
 - . will be made in a way that has the least adverse effect on the environment; and
 - . has received the treatment required in the reclamation requirements.
6. The discharger shall promote and encourage increased reclamation to reduce the amount of discharge to San Pablo Bay during the period from September 1 through May 31.
7. The requirements prescribed by this Order supersede the requirements prescribed by Order Nos. 74-97, and 79-78. Order Nos. 74-97 and 79-78 are hereby rescinded.
8. The discharger shall review and update annually its contingency plan as required by Regional Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
9. The discharger shall comply with any Self-Monitoring Program as ordered by the Executive Officer.
10. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.
11. In reviewing compliance with the limits of Effluent Limitation B.4.f. of this Order, the Board will take special note of the difficulties encountered in achieving compliance during periods of high wet weather flow.
12. This Order expires April 15, 1985. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

13. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 15, 1980.

FRED H. DIERKER
Executive Officer

Attachment:
Standard Provisions, Reporting
Requirements & Definitions (April 1977)